

Abstract

A fuel processing system that includes an improved sulfur-removal assembly. The fuel processing system includes at least one fuel processor adapted to produce hydrogen gas from water and a carbon-containing feedstock, such as at least one hydrocarbon or alcohol. The sulfur-removal assembly includes a sulfur-absorbent bed that contains a sulfur-absorbent material, such as a low-temperature shift (LTS) catalyst, that is adapted to remove, or reduce the concentration of, sulfur-compounds from the carbon-containing feedstock.